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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/626,071	07/23/2003	Lloyd Paul Mills	200310530-1	9762
22879 7590 02/01/2010 HEWLETT-PACKARD COMPANY Intellectual Property Administration 3404 E. Harmony Road Mail Stop 35 FORT COLLINS, CO 80528			EXAMINER KARDOS, NEIL R	
			ART UNIT 3623	PAPER NUMBER
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary

Application No.

10/626,071

Applicant(s)

MILLS, LLOYD PAUL

Examiner

Neil R. Kardos

Art Unit

3623

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 September 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-35 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-35 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/22)
- Paper No(s)/Mail Date _____

- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

This is a **FINAL** Office Action on the merits in response to communications filed on September 30, 2009. Currently, claims 1-35 are pending and have been examined.

Response to Arguments

Applicant's arguments filed on September 30, 2009 have been fully considered but they are not persuasive. Applicant's arguments appear to be a duplicate of the arguments set forth in Applicant's response dated April 2, 2009. These arguments were addressed in the non-final office action dated June 15, 2009. These duplicative arguments are not found persuasive for the reasons set forth in the office action dated June 15, 2009.

Furthermore, the previous office action dated June 15, 2009 contained a requirement for information under 37 C.F.R. 1.105. Applicant's response on September 30, 2009 is not complete because it does not include any reply to the requirement for information. Applicant must include a response to this requirement for information in the next office action.

Response to Amendment

Applicant's amendments to claims 1 and 30 are NOT sufficient to overcome the § 101 rejections set forth in the previous Office Action for the reasons explained below.

Applicant's amendments to the claims are not sufficient to overcome the § 103 rejections set forth in the previous Office Action for the reasons explained below.

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 1-11 and 30-35 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

Claims 1 and 30: Claims 1 and 30 are directed toward the statutory category of a process. In order for a claimed process to be patentable subject matter under 35 U.S.C. § 101, it must either: (1) be tied to a particular machine, or (2) transform a particular article to a different state or thing. *See Diamond v. Diehr*, 450 U.S. 175, 184 (1981); *Parker v. Flook*, 437 U.S. 584, 588 n.9 (1978); *Gottschalk v. Benson*, 409 U.S. 63, 70 (1972). If neither of these requirements is met by the claim, the method/process is not patentable subject matter under § 101. Thus, to qualify as a statutory process under § 101, the claim should positively recite the machine to which it is tied (e.g. by identifying the apparatus that accomplishes the method steps), or positively recite the subject matter that is being transformed (e.g. by identifying the material that is being changed to a different state). Nominal recitations of structure in an otherwise ineligible method fail to make the method a statutory process. *See Benson*, 409 U.S. at 71-72. Thus, incidental physical limitations such as insignificant extra-solution activity and field of use limitations are not sufficient to convert an otherwise ineligible process into a statutory one.

Here, the claimed process fails to meet the above requirements for patentability under § 101 because it is not tied to a particular machine and does not transform underlying subject matter. Although the claims recite a processor in the preamble, the preamble is generally not given patentable weight. Further, this recitation amounts to insignificant extra-solution activity

or field of use limitations. Finally, the recitation "allowing a processor to perform the steps of" does not positively recite the processor.

Claims 2-11 and 31-35: Dependent claims 2-11 and 31-35 are rejected for failing to remedy the deficiencies of the claims from which they depend.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-9, 12-21, 24-28, and 30-35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Subramanian et al. (US 2004/0117236) in view of Brown et al. (US 2003/0055677), and further in view of Zhang, "Modelling Consumer's Demand Uncertainty in Electricity Forward Contracts."

Claims 1, 12, 24 and 30: Subramanian et al. discloses a method for forecasting a potential cost for an indirect procurement commodity (as per claim 1) (paragraph [0007], lines 1-5), a system for forecasting a potential cost for an indirect procurement commodity (as per claim 12) (paragraph [0016], lines 1-3), a computer program product for forecasting a potential cost for an indirect procurement commodity, the computer program product comprising a computer usable medium having computer readable program means (as per claim 24) (paragraph [0016],

line 12, paragraph [0017], lines 1-4), and a method of doing business (as per claim 30) (paragraph [0007], lines 1-5) comprising:

- allowing a processor to perform the steps of receiving a volume (i.e. load) of the indirect procurement commodity to be block purchased for a future period (paragraph [0017], line 4, paragraph [0018], lines 1-2);
- calculating a cost of the volume of the indirect procurement commodity based on historical consumption data for a past period (paragraph [0022], lines 5-8, paragraph [0018], lines 6-8); and
- forecasting a potential cost of the indirect procurement commodity to be purchased for a future period based on the calculated cost (paragraph [0018], lines 6-10) and at least one variable factor (i.e. on-site generation options) associated with the indirect procurement commodity (paragraph [0009], lines 1-5).

Subramanian et al. does not explicitly disclose that the at least one variable factor is a market imbalance factor. Brown et al. discloses calculating a market imbalance factor (i.e. predicted utility margins and predicted incremental costs) (paragraph [0048]) and [0052] for the future period based on data associated with the past period (paragraph [0011], lines 7-12, paragraph [0044], lines 1-6). It would have been obvious to one having ordinary skill in the art at the time the invention was made to combine the method, system and computer program product of Subramanian et al. with the feature of calculating a market imbalance factor (i.e. predicted utility margins and predicted incremental costs) for the future period based on data associated with the past period as taught by Brown et al., as both Subramanian et al. and Brown et al. are directed toward the method, system and computer program product for forecasting a

potential cost for an indirect procurement commodity. The motivation for doing so would have been to take into account the cost of overages and deficits of energy used (e.g. in a more efficient manner).

Subramanian and Brown do not explicitly disclose wherein the market imbalance factor is a function of an index price of energy. However, Brown does disclose "associating a monetary value with the predicted utility margins" and the "associated monetary value may include the estimated utility prices" (see Brown, ¶ 52). Furthermore, Brown discloses a similar equation to the one on page 10 of Applicant's specification: "The predicted incremental costs may be calculated by multiplying the associated monetary values by the predicted utility margins" (see Brown: ¶ 52). While Brown's "associated monetary value" is not explicitly an "index price" of energy, the two essentially perform the same function in that they are associated with the price of a utility. Examiner takes Official Notice that it was well-known in the art at the time the invention was made to use price indices to estimate utility prices (e.g. using the California Independent System Operator index prices). Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use well-known price indices as Brown's estimated utility prices when determining Brown's predicted incremental costs (i.e. market imbalance factor). One of ordinary skill in the art would have been motivated to do so for the benefit of efficiencies and accuracies gained through standardization (e.g. through the use of a standard price index).

Subramanian and Brown do not explicitly disclose the equation $M_i = (V_B - V_i) \cdot x_i$, where M_i is the market imbalance factor for a cell, i , of a consumption matrix, V_B is a block volume of the indirect procurement commodity, V_i is an actual volume of consumption for the cell i , and x_i

is the index price of energy wherein the index price of energy is publicly available. However, Brown does disclose "The predicted incremental costs may be calculated by multiplying the associated monetary values by the predicted utility margins" (see Brown: ¶ 52). In Brown, the predicted utility margins are synonymous to the claimed $V_B - V_i$ (the difference, or margin, between what is purchased and what is consumed), and the associated monetary values of Brown are representative of the claimed index price of energy. As discussed above, it was well-known in the art at the time the invention was made to use price indices to estimate utility prices, including public price indices (e.g. using the California Independent System Operator index prices). Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use well-known price indices as Brown's estimated utility prices when determining Brown's predicted incremental costs (i.e. market imbalance factor). One of ordinary skill in the art would have been motivated to do so for the benefit of efficiencies and accuracies gained through standardization (e.g. through the use of a standard price index).

Furthermore, Zhang discloses the expression $(M-D)*P$, where M is the contracted energy quantum (i.e. the purchased volume of energy), D is the consumer demand (i.e. the actual volume of consumption), and P is the price of energy. (See section 2: pages 455-456; page 455 defines the variables; page 456, section 2.1, paragraph 3 et seq. contains the expression $(M-D)*P$). This is the same as the claimed equation, except that P is the contract price rather than the index price of energy. As discussed above, it was well-known in the art at the time the invention was made to use price indices, including those that are public available (especially in the context of requirements contracts). Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to substitute well-known price indices for Zhang's

contract price P. One of ordinary skill in the art would have been motivated to do so for the benefit of efficiencies, accuracies, and fairness gained through standardization (e.g. through the use of a standard price index).

Claims 2 and 31: Subramanian et al. discloses wherein the indirect procurement commodity comprises energy (paragraph [0002], lines 1-3).

Claims 3 and 13: Subramanian et al. discloses multiplying the volume (i.e. load) of the indirect procurement commodity by a time factor wherein the time factor is associated with the past period (paragraph [0031], paragraph [0030], lines 8-11).

Claims 4 and 14: Subramanian et al. discloses wherein the time factor comprises a number of off-peak hours in the past period (paragraph [0025], paragraph [0030], lines 8-11).

Claims 5 and 15: Subramanian et al. discloses wherein the time factor comprises a number of peak hours in the past period (paragraph [0025], paragraph [0030], lines 8-11).

Claims 6, 16, 25 and 32: Subramanian et al. discloses wherein forecasting a potential cost of the indirect procurement commodity further comprises calculating at least one variable (i.e. on-site generation options) (paragraph [0079], lines 1-5, paragraph [0098]).

Subramanian et al. does not explicitly disclose that the at least one variable factor is a market imbalance factor. However, this deficiency is met by Brown, as discussed in the rejection of claim 1.

Claims 7, 19, 26, and 33: Subramanian et al. discloses the invention substantially as claimed. However, Subramanian et al. does not disclose wherein calculating the market imbalance factor comprises: calculating the market imbalance factor for the future period based on data associated with the past period. However, this deficiency is met by Brown, as discussed in the rejection of claim 1.

Claims 8, 20, 27 and 34: Subramanian et al. discloses the invention substantially as claimed. However, Subramanian et al. does not disclose wherein data associated with the past period comprises consumption data and price index data.

Brown et al. discloses wherein data associated with the past period comprises consumption data (i.e. usage data) and price index data (pricing data).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to combine the method, system and computer program product of Subramanian et al. with the feature of wherein data associated with the past period comprises consumption data and price index data as taught by Brown et al., as both Subramanian et al. and Brown et al. are directed to the method, system and computer program product for forecasting a potential cost for an indirect procurement commodity. The motivation for doing so would have

been to use historical data to calculate the market imbalance factor (and the known efficiencies associated therewith).

Claims 9, 21, 28, and 35: Subramanian et al. discloses the invention substantially as claimed. However, Subramanian et al. does not disclose wherein forecasting the potential cost of the indirect procurement commodity further comprises: adding the market imbalance factor to the cost of the volume of the indirect procurement commodity thereby generating a forecasted cost of the volume of the indirect procurement commodity.

Brown et al. discloses calculating a market imbalance factor (i.e. predicted utility margins) (paragraph [0048]) for the future period based on data associated with the past period (paragraph [0011], lines 7-12, paragraph [0044], lines 1-6). It is common knowledge in the prior art to add the market imbalance factor into the cost of the volume of the indirect procurement commodity once it has been calculated.

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to combine the method, system and computer program product of Subramanian et al. with the feature of wherein forecasting the potential cost of the indirect procurement commodity further comprises: adding the market imbalance factor to the cost of the volume of the indirect procurement commodity thereby generating a forecasted cost of the volume of the indirect procurement commodity as taught by Brown et al., as both Subramanian et al. and Brown et al. are directed to the method, system and computer program product for forecasting a potential cost for an indirect procurement commodity. The motivation for doing so would have been to take into account the cost of overages and deficits of energy used in

generating a forecasted cost of the volume of the indirect procurement commodity (and the efficiencies associated therewith).

Claim 17: Subramanian et al. discloses a system for forecasting a potential cost for an indirect procurement commodity (paragraph [0016], lines 1-3), comprising:

- a graphical user interface (i.e. computer screen) (paragraph [0016], line 9); and
- a cost forecasting tool coupled to the graphical user interface (paragraph [0017], lines 1-4) capable of:
 - receiving a volume (i.e. load) of the indirect procurement commodity to be block purchased for a future period (paragraph [0017], line 4, paragraph [0018], lines 1-2);
 - calculating a cost of the volume of the indirect procurement commodity based on historical consumption data for a past period (paragraph [0022], lines 5-8, paragraph [0018], lines 6-8); and
 - forecasting a potential cost of the indirect procurement commodity to be purchased for a future period based on the calculated cost (paragraph [0018], lines 6-10) and at least one variable factor (i.e. on-site generation options) associated with the indirect procurement commodity (paragraph [0009], lines 1-5).

Subramanian et al. does not explicitly disclose that the at least one variable factor is a market imbalance factor, nor does Subramanian explicitly disclose the claimed equation. However, these deficiencies are met by Brown and Zhang, as discussed in the rejection of claim 1. Claim 17 is substantially similar to claim 1 and is rejected under similar rationale.

Claim 18: Subramanian et al. discloses wherein forecasting a potential cost of the indirect procurement commodity further comprises: calculating the at least one variable (i.e. on-site generation options) (paragraph [0079], lines 1-5, paragraph [0098]).

Subramanian et al. does not explicitly disclose that the at least one variable factor is a market imbalance factor. However, this deficiency is met by Brown, as discussed in the rejection of claim 1.

Claims 10-11, 22-23 and 29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Subramanian et al. in view of Brown et al. and Zhang, and further in view of Zaloom (US 6,366,889).

Claims 10, 22 and 29: Subramanian et al. and Brown et al. disclose the invention substantially as claimed. However, Subramanian et al. and Brown et al. do not disclose wherein forecasting the potential cost of the indirect procurement commodity further comprises: factoring a market fluctuation component into the forecasted cost of the volume of the indirect procurement commodity.

Zaloom discloses wherein forecasting the potential cost of the indirect procurement commodity further comprises: factoring a market fluctuation component (i.e. fuel cost adjustment/environmental surcharge) into the forecasted cost of the volume of the indirect procurement commodity (column 17, lines 52-57).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to combine the method, system and computer program product of

Subramanian et al. and Brown et al. with the feature of wherein forecasting the potential cost of the indirect procurement commodity further comprises: factoring a market fluctuation component into the forecasted cost of the volume of the indirect procurement commodity as taught by Zaloom, as Subramanian et al., Brown et al., and Zaloom are directed to the method, system and computer program product for forecasting a potential cost for an indirect procurement commodity. The motivation for doing so would have been to consider market fluctuation into the forecasted cost of the volume of the indirect procurement commodity (and the efficiencies associated therewith).

Claims 11 and 23: Subramanian et al. and Brown et al. discloses the invention substantially as claimed. However, Subramanian et al. and Brown et al. do not disclose wherein the market fluctuation component comprises a best guess estimate of market fluctuation during the future period.

Zaloom discloses wherein the market fluctuation component (i.e. fuel cost adjustment/environmental surcharge) (column 17, lines 52-57) comprises a best guess (i.e. realistic) estimate during the future period (column 17, lines 64-67).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to combine the method and system of Subramanian et al. and Brown et al. with the feature of wherein the market fluctuation component comprises a best guess estimate of market fluctuation during the future period as taught by Zaloom, as Subramanian et al., Brown et al. and Zaloom are directed to the method and system for forecasting a potential cost for an indirect procurement commodity. The motivation for doing so would have been to anticipate

market fluctuation when forecasting a potential cost of the volume of the indirect procurement commodity (and the efficiencies associated therewith).

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Neil R. Kardos whose telephone number is (571) 270-3443. The examiner can normally be reached on Monday through Friday from 9 am to 5 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Beth Boswell can be reached on (571) 272-6737. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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